

Application No.: 10/643,858Docket No.: V9661.0040**REMARKS**

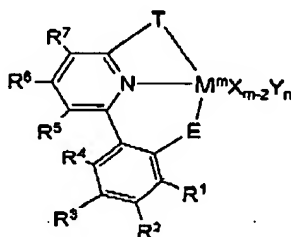
Claims 1 to 42 are in the case. Claims 1 - 5, 11 - 21, and 27 were withdrawn from consideration in this case. Claims 6 - 8 and 22 - 24 were amended, of which claims 6 and 22 were rewritten in independent form including respective base claims. Claims 8 and 24 were amended and new claims 28 - 42 were added to depend from the allowable claims 6 and 22, respectively. The abstract was amended as required. The Examiner is respectfully requested to consider the subject application in view of above amendments and the following remarks.

Applicants wish to extend their appreciation to the Examiner for telephoning their representative regarding a restriction requirement as stated on pages 2 and 3 of the Office Action. Applicants hereby affirm their election of Group II claims 6 - 7 and 22 - 23 without traverse. However, applicants reserve their right to file one or more divisional applications to pursue patent protection of the non-elected claims.

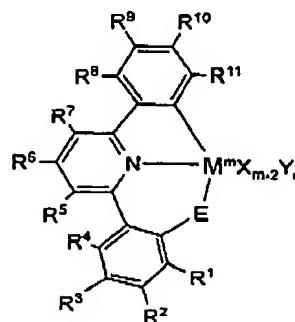
The abstract was objected to for reasons stated on page 4 of the Office Action. In response, applicants amended the abstract in view of the restriction requirement. Accordingly, the subject objection is believed to be overcome.

Claims 6, 7, 22, and 23 were rejected under 35 U.S.C. § 112, first paragraph, for reasons set forth on page 4 of the Office Action. This rejection is respectfully traversed based on the following reasons.

The claimed invention is directed to an olefin polymerization catalyst system, which comprises a catalyst of formula I or II below:



(I)



(II)

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In the catalyst, M is a metal of Group 3 to Group 10 elements and Lanthanide series elements.

Applicants stated in the specification that a "cyclometallated catalyst" is:

a compound in which the metallic Group 3 to Group 10 or Lanthanide elements is part of a ligand-metal ring system containing from 4 to 8 atoms, wherein the ligand-metal ring system contains a metal-carbon [M-C] bond. The ring system is stabilized due to the chelate effect, i.e., the ligand is coordinated to the metal by at least two bonds.

Applicants also disclosed preferred embodiments of such metal, which are Ti, Zr, and Hf and further described various examples in connection with the above preferred metals. For instance, applicants disclosed to synthesize an intermediate. The intermediate was then synthesized with a metal reagent formed with a metal in Group 3 to Group 10 and Lanthanide series. The disclosure also provides various conditions for the synthesis process including time and temperature.

Based on the above, one skilled in the art is capable of determining a metal chosen from Group 3 to Group 10 elements and Lanthanide series elements and forming a catalyst as shown in formula I or II. Although the examples in the specification show the various measurements in connection with the exemplary catalysts, the claimed invention is not limited to such specific measurements.

Therefore, applicants respectfully submit that the specification provides sufficient disclosure to enable one skilled in the art to carry out the claimed invention. Accordingly, the subject rejection is believed to be overcome.

Claims 6, 7, 22, and 23 were objected to for informalities listed on pages 4 and 5 of the Office Action. Applicants wish to thank the Examiner for his suggested corrections, which have been adopted in the amendments to the claims. Accordingly, the subject rejection is believed to be overcome.

Claims 6 and 7 were rejected under 35 U.S.C. § 112, first paragraph, for reasons set forth on page 5 of the Office Action. This rejection is respectfully traversed based on the following reasons.

Claim 6 recites that T is $-CR^9R^{10}-$, in which R^9 and R^{10} each are defined to be independently -H, -halo, $-NO_2$, $-CN$, $-(C_1-C_{30})$ hydrocarbyl, $-O(C_1-C_{30})$ hydrocarbyl, $-N((C_1-C_{30})$ hydrocarbyl) $_2$, $-Si((C_1-C_{30})$ hydrocarbyl) $_3$, $-(C_1-C_{30})$ heterohydrocarbyl, -aryl, or

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-heteroaryl, each of which is unsubstituted or substituted with one or more -R⁸ groups. R⁸ is -halo, -(C₁-C₃₀)hydrocarbyl, -O(C₁-C₃₀)hydrocarbyl, -NO₂, -CN, -Si((C₁-C₃₀)hydrocarbyl)₃, -N((C₁-C₃₀)hydrocarbyl)₂, -(C₁-C₃₀)heterohydrocarbyl, -aryl, or -heteroaryl.

Applicants disclosed in the specification various forms of "T" in Examples 1 to 11. Base on the claim recitation and in view of the various examples of T provided in the specification, one skilled in the art is capable of carried out the claimed invention. Accordingly, the subject rejection is believed to be overcome.

Claims 6, 7, 22, and 23 were rejected under 35 U.S.C. § 112, second paragraph, for reasons set forth on page 5 of the Office Action. Again, applicants wish to thank the Examiner for his helpful suggestions, which have been fully taken into consideration in the above amendments to the claims. Accordingly, the subject rejection is believed to be overcome.

Applicants have shown that claims 6 - 10, 22 - 26, and 28 - 42 are believed to be in Immediate condition for allowance and such action is earnestly solicited.

No fee is believe to be due for this Amendment. Should any fee be required, please charge such fee to Deposit Account No. 50-2215.

Respectfully submitted,

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